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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,523	07/20/2000	Bruce E. Novich	1596C5	2899

7590 06/03/2004

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EXAMINER	
GRAY, JILL M	

ART UNIT	PAPER NUMBER
1774	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/620,523	NOVICH ET AL.
	Examiner	Art Unit
	Jill M. Gray	1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-58* is/are pending in the application.

4a) Of the above claim(s) *4,6-11,21-39 and 48-58* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,12-20 and 40-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 18, 40, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Publication 1-24933 (hereinafter Nagamine), for reasons of record.

Claims 2-3, 5, 12-17, 19-20, and 41-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamine, 1-249333 as applied above to claims 1, 18, 10, and 47, in view of Russian Patent Publication 2072121 (hereinafter Adolfovna), for reasons of record.

Response to Arguments

Applicant's arguments filed February 19, 2004 have been fully considered but they are not persuasive.

Applicants argue that Nagamine does not teach or even remotely suggest a motivation to making the presently claimed invention, further arguing that every single example of Nagamine utilizes a glass cloth with a sizing material that required degreasing prior to physical test of the cloth or impregnation. Applicants additionally argue that the disclosure of Nagamine in effect, teaches away from the use of non-

degreased sizing agents and, consequently, away from the inclusion of non-degreased sizing agents in Nagamine.

The examiner disagrees. It is the position of the examiner that "all of the disclosures in a reference must be evaluated for what they fairly teach one of ordinary skill in the art. Thus, in *In re Smith*, 32 CCPA 959, 148 F.2d, 351, 65 USPQ 167; in *In re Nehrenberg,* 47 CCPA 1159, 280 F.2d 161, 126 USPQ 383; and in *In re Watanabe,* 50 CCPA 1175, 315 F.2d 924, 137 USPQ 350, this court affirmed rejection based on art which we concluded rendered the claimed invention obvious to those of ordinary skill in the art despite the fact that the art teachings relied upon in all three cases were phrased in terms of non-preferred embodiment or as being unsatisfactory for the intended purposes." *In re Boe,* 148 USPQ 507 (CCPA 1966). The fact that Nagamine teaches that a non-desizing sizing agent has been developed and could be used improving economic aspects of production cannot be construed as "teaching away" rather, as providing motivation to the skilled artisan concerned about improving production to use said sizing agent.

Applicants argue that the examiner has not presented evidence that the teachings of Nagamine would have provided one of ordinary skill in the art with a reasonable expectation of success in making the present invention.

In this concern, obviousness does not require absolute predictability, however, at least some degree of predictability is required. Moreover, "[i]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of

ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter,* 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In the present case, Nagamine explicitly teaches on page 10 that as the sizing agent used, various known agents can be used, further teaching that a sizing agent which does not require degreasing or surface treatment has been developed that eliminates the necessity of twisting, degreasing and surface treatment and significantly improves productivity and production yield. Clearly the skilled artisan, at the time the invention was made, and in possession of the explicit teachings of Nagamine would have been motivated to form a fabric using a sizing agent that does not require degreasing, with the reasonable expectation of eliminating twisting, degreasing and surface treatment, resulting in success in improving productivity and production yield.

Applicants argue that only in hindsight could it have been obvious to one with the cited reference before her to have pieced together the teachings in the claimed manner with a reasonable expectation of success.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argue that neither Nagamine nor Adolfovna teach or even remotely suggest a motivation to combine their teachings, further arguing that Nagamine provides no suggestion or motivation to add particles to the sizing composition and Adolfovna does not remedy the deficiencies of Nagamine and does not provide any motivation for adding the particulate material in its binder to the sizing composition of Nagamine.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Adolfovna teaches that the inclusion of boron nitride particles in the fabrication of substrates for printed circuit boards makes it possible to improve heat resistance of the obtained material, increases thermal conductivity and decrease dielectric loss tangent.

Applicants again argue that the examiner has used hindsight reconstruction.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Therefore, the examiner's position remains that the prior art references would have rendered obvious the invention as claimed in the present claims.

No claims are allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jill M. Gray
Examiner
Art Unit 1774

jmg

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
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